

Tuesday, June 27, 2017 12:08:06 PM

Item ID: D3571-1

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Guide

Stop

NS2

Start Date: 7/5/2017 **Start Qty:** 6.00

6

Cust Item ID:

Required Date: 7/20/2017 **Req'd Qty:** 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

DAS

21

Date: JUL 03 2017

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3571	Rev A

100		0.00		DAS 14 9-89
100	BAND SAW			
Bandsaw	Memo	0.13		
Jeaspa Bandsaw	Cut blank 2.90 " long			
110		1.73		
110	HAAS CNC VERTICAL MACHINING #1			
HAAS 1	Memo	1.77		
HAAS CNC vertical machine #1	1- Mill as per Folio FA675 Rev: <u>49</u> & Dwg D3571 Rev: <u>A</u> 2-Deburr per dwg D3571			
120		0.00		
120	QC2- Inspect parts off machine FAI/FAIB			
QC	Memo	0.06		
Quality Control				

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 163331

Tuesday, June 27, 2017 12:08:06 PM

163331

Page 2

Item ID: D3571-1

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6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC8- Inspect parts - second check	0.00							DAS
130									33
QC	Memo	0.12				1	4		9-89
Quality Control									17/07/13
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.15							
Hand Finishing									
150	Grey Sandtex (Ref: 4.3, 5.6) per QSI005 4.3	0.00							
150									
Powdercoat	Memo	0.27							
Powder Coating	START TIME: 8:05								
	FINISH TIME: 9:05								

(X6) 27/07/14
BEB

6 17-08-1 88 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Work Order ID 163331

Tuesday, June 27, 2017 12:08:06 PM

163331

Page 3

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N900040100

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NS1

Revision ID:

Stop

NS2

Item Name: Guide

Start Date: 7/5/2017 Start Qty: 6.00

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Cust Item ID:

Required Date: 7/20/2017 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC3- Inspect Part Finish

0.00

160

QC

Memo

0.06

Quality Control

DAS
38
9-89

AUG 01 2017

170

Identify as per dwg & Stock Locations STOCK

0.00

170

Packaging

Memo

0.06

Packaging

AUG 02 2017

DAS
6
9-89

180

QC21- Final Inspection - Work Order Release

0.00

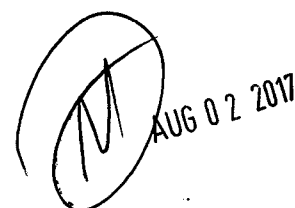
180

QC

Memo

0.60

Quality Control

AUG 02 2017

17/8/2017

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Tuesday, June 27, 2017 12:08:04 PM

Page 1

Work Order ID: 163331

163331

Parent Item: D3571-1

D3571-1

Parent Item Name: Guide

Start Date: 7/5/2017

Required Date: 7/20/2017

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A New Issue 07-02-01 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.750X01.50 0		Purchased	No			100	f	27.2370	0.241	1.522105			

M6061T6B0 750X01 500

6061-T6 Bar .750 X 1.50

**

DAS
49
9-89

17/67/4

Location	Loc Qty	Loc Code
MAT	6.237	
m135247	0.557	
m135780	5.68	
MAT003	21	
m137043	1	
m137513	20	

1.5 + .5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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OTHER : ☐																																																															

DART AEROSPACE LTD		Work Order:	6333
Description: Guide		Part Number:	D3571-1
Inspection Dwg: D3571	Rev: A	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.698	+/-0.010	.702	✓		Vern ML-06	
Ø1.00 Depth 100	+/-0.010	1.000	✓		Vern ML-06	
2.75	+/-0.030	2.754	✓		Vern ML-06	
1.38	+/-0.030	1.374	✓		Vern ML-06	
1.25	+/-0.030	1.251	✓		Vern ML-06	
0.63	+/-0.010	.625	✓		Vern ML-06	
0.031 chamfer	+/-0.010	.035	✓		Vern ML-06	
Ø0.500	+0.006/-0.001	.499	✓		Pin gauge	
Ø0.201	+0.005/-0.001	Ø.201	✓		Pin gauge	
R0.25	+/-0.030	R.250	✓		Gabarit rayon	
0.260	+0.000/-0.010	.255	✓		Vern ML-06	
Ø0.385 x 100°	+0.006/-0.001 x 0.5°	.389	✓		Pin gauge	
0.125	+/-0.010	.126	✓		Vern ML-06	
2.250	+/-0.010	2.250	✓		Vern ML-06	
0.250	+/-0.010	.249	✓		Vern ML-06	
0.188	+/-0.010	.188	✓		Vern ML-06	
0.063 chamfer	+/-0.010	.068	✓		Vern ML-06	

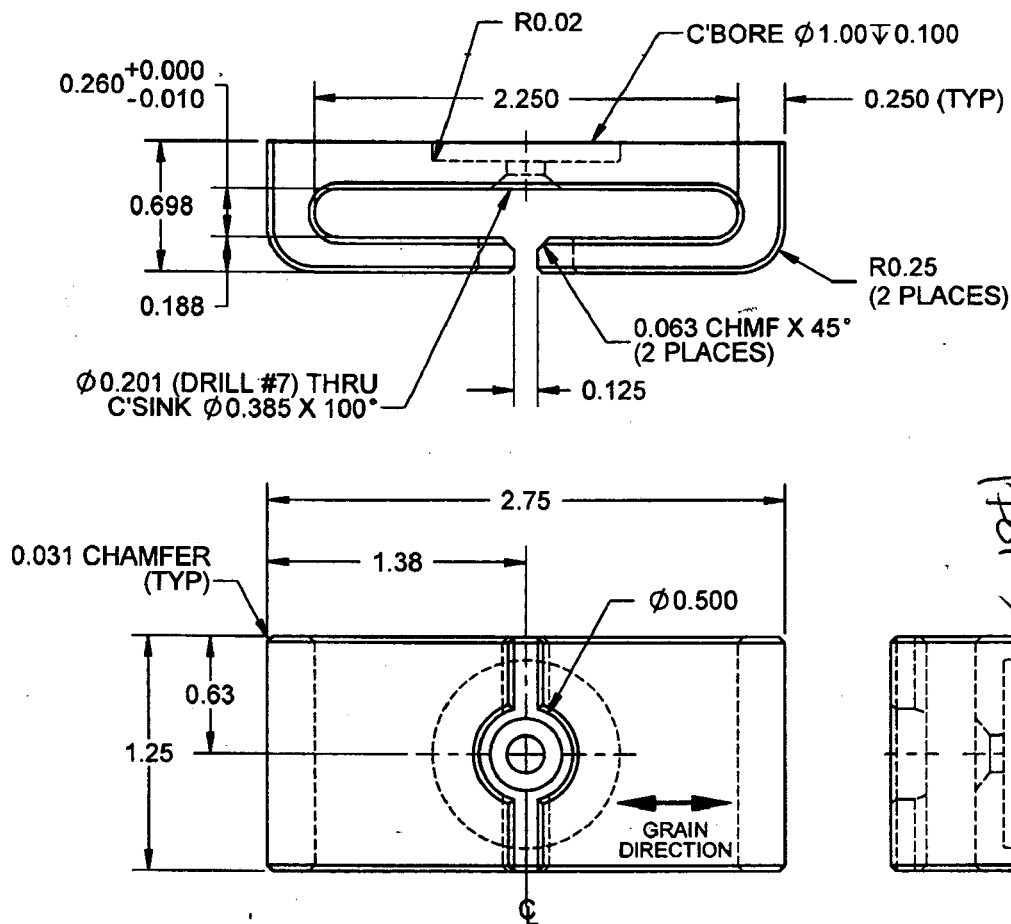
Measured by: <i>MM</i>	DAS 14 9-89	Audited by: <i>SS</i> 9-89	Prototype Approval:	N/A
Date: 2017/07/13		Date: 17/07/13	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.04.16	New Issue	KJ/JLM	<i>[Signature]</i>



DESIGN <i>LE</i>	DRAWN BY <i>LE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3571	REV. A SHEET 1 OF 2
DATE 07.01.29	TITLE GUIDE		SCALE 1:1
REV A	DATE 07.01.29	DESCRIPTION NEW ISSUE	

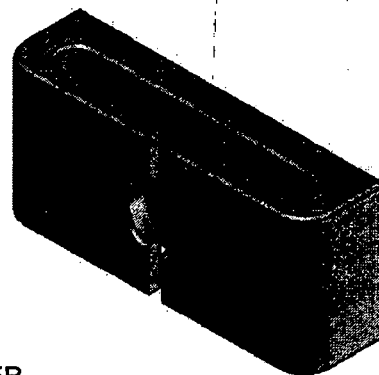
RELEASED
07.04.12 *[Signature]*



D3571-1 GUIDE

NOTES:

- 1) MATERIAL: 6061-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR
PER QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS 4160 (REF DART SPEC M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3571-1" USING FINE POINT PERMANENT INK MARKER
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 7) PART IS SYMMETRIC ABOUT ϕ



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